

## ABSTRACT

A metallic film (2) made of a metal on which an electroless plating film can be deposited is formed on part of the surface of a thermoelectric semiconductor (8) which is an object to be plated, made of a constituent material to which an electroless plating can not be directly applied, and subsequently, the thermoelectric semiconductor (8) is dipped in an electroless plating bath, whereupon a conductive film (3) having a uniform thickness, made up of an electroless plating film, is formed on the entire surface of the thermoelectric semiconductor (8) containing the surface of the metallic film (2).